Large Double-EIT and Mutual Phase Shifts in Rubidium\textsuperscript{1} BARRY SANDERS\textsuperscript{2}, ZENG-BIN WANG, KARL-PETER MARZLIN, Institute for Quantum Information Science, University of Calgary — We propose a scheme to achieve large double-EIT and mutual phase shifts for two slow, co-propagating pulses of light through a Rubidium gas, with the additional advantages of enabling equal group velocities for the two pulses and avoiding cancellations of nonlinearities at resonance.

\textsuperscript{1}This project is supported by iCORE and NSERC.
\textsuperscript{2}Also: Centre for Quantum Computer Technology, Macquarie University, Sydney

Barry Sanders
Institute for Quantum Information Science, University of Calgary

Date submitted: 05 Dec 2005